

Serial No. 09/754,018

Amendments to the Claims

1. (Currently Amended) A control program for controlling an operation of a microprocessor, the control program comprising a concealed program recoverable by a data scramble circuit and a non-concealed program, wherein the data scramble circuit is a hardware circuit.
2. (Original) A control program according to claim 1, wherein a recovered program recovered from the concealed program includes:
 - at least one function; and
 - a relative address list indicating a relative address of the at least one function in the recovered program, wherein the relative address list is provided at a prescribed location in the recovered program.
3. (Currently Amended) A device, comprising:
 - a microprocessor;
 - a program memory for storing a control program for controlling an operation of the microprocessor, the control program including a concealed program and a non-concealed program;
 - a rewritable memory for storing a copy of the concealed program copied from the concealed program stored in the program memory; and
 - a data scramble circuit for recovering the concealed program stored in the rewritable memory as a recovered program, wherein the data scramble circuit is a hardware circuit.
4. (Original) A device according to claim 3, wherein the data scramble circuit acts as an error correction circuit.
5. (Original) A device according to claim 3, wherein the recovered program includes:
 - at least one function; and
 - a relative address list indicating a relative address of the at least one function in the recovered program, wherein the relative address list is provided at a prescribed location in the recovered program.
6. (Currently Amended) A method for creating a control program, comprising:

Serial No. 09/754,018

a program descramble step of descrambling a portion of a control program by reverse scramble of a data scramble circuit in a device to be controlled, thereby creating a concealed program as a portion of the control program; and

a program storing step of storing the control program including the concealed program in a program memory so that the control program controls an operation of a microprocessor in the device to be controlled, wherein the data scramble circuit is a hardware circuit.

7. (Original) A method for creating a control program according to claim 6, wherein the program descramble step includes the steps of:
 - creating a non-concealed program; and
 - synthesizing the concealed program and the non-concealed program into the control program.
8. (Currently Amended) A method for operating a control program, comprising:
 - a program copying step of copying a concealed program which is a portion of the control program from a program memory into a rewritable memory;
 - a program recovery step of recovering the concealed program copied by the program copying step as a recovered program by a data scramble circuit; and
 - a program execution step of executing a non-concealed program included in the control program and the recovered program, wherein the data scramble circuit is a hardware circuit.
9. (Original) A method for operating a control program according to claim 8, further comprising a program erasure step of erasing the recovered program from the rewritable memory.